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10/729,772	12/08/2003	Erik de Groot	I20 05001US	3423

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EXAMINER	
PHAM, THAI V	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/729,772	DE GROOT ET AL.	
	Examiner	Art Unit	
	Thai Van Pham	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/08/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is the initial office action based on the application filed on July 25, 2006. Claims 1 – 25 are currently pending and have been considered below.

Claim Objections

1. Claim 10 is objected to because of the following informalities: typographical error. The claim recites "*setting a version date upon said check*". The Examiner notes that "*check*" is supposed to be "*check-in*".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 – 8, 12 – 16, and 18 – 25 are rejected under 35 U.S.C. 102(b) as being anticipated by **Imachi** (6,272,678).

-- Claim 1: **Imachi** discloses a method of source control, comprising:

• enabling a level of source control from a selection of at least two levels (i.e., fixed and auto-changing modes; Fig. 4, page 8 line 24 – page 9 line 4; Fig. 10, page 5 lines 5 - 58); and

• automatically or manually setting a version number of an object, depending on said level (i.e., fixed mode sets the version of an object to a user-selected version,

whereas auto-changing mode automatically sets the version of an object; page 9 lines 14 - 58).

-- Claim 2: **Imachi** discloses the method according to claim 1 further comprising: providing a capability to switch said level of source control to another level (i.e., version up mode menu selection; Fig. 12, page 10 line 62 – page 11 line 11).

-- Claim 3: **Imachi** discloses the method according to claim 1 and further discloses that automatically setting said version number is based on a degree of change to said object (i.e., auto-changing mode; Fig. 4, page 8 line 24 – page 9 line 4).

-- Claim 4: **Imachi** discloses the method according to claim 1 further comprising: storing attributes associated with said object in a database (i.e., version number, date... associated with a version of an object; Fig. 14).

-- Claim 5: **Imachi** discloses the method according to claim 1 and further discloses that said object is a control strategy loadable to a controller in a process control system (Page 4, lines 15 – 31).

-- Claim 6: **Imachi** discloses the method according to claim 1 and further discloses that said at least two levels are level none, level basic, and level full (i.e., fixed, auto-changing, and preservation method modes; Figs. 21 – 23, page 14 line 32 – page 16 line 27).

-- Claim 7: **Imachi** discloses the method according to claim 6 and further discloses that for said level none (i.e., fixed-mode), said method further comprises:

• receiving user-entered text for said version number (Fig. 18, page 13 lines 22 - 32);

• setting a created-by name set upon receiving a first save changes request (i.e., writer for V1; Fig. 14);

• setting a modified-by name upon receiving a save changes request (i.e., writers for versions other than V1; Fig. 14);

• setting a date-created date upon receiving said first save changes request (i.e., preparation date for V1; Fig. 14); and

• setting a version date upon receiving said save changes request (i.e., preparation date; Fig. 14).

-- Claim 8: **Imachi** discloses the method according to claim 6 and further discloses that for said level basic, said method further comprises:

• automatically incrementing said version number upon receiving a save changes request, including a first save changes request (Page 9, lines 14 – 58);

• setting a created-by name upon receiving said first save changes request (i.e., writer for V1; Fig. 14);

• setting a modified-by name upon receiving said save changes request, including a first save changes request (i.e., writers for versions other than V1; Fig. 14);

• setting a date-created date upon receiving said first save changes request (i.e., preparation date for V1; Fig. 14);

• setting a version date upon receiving said save changes request, including a first save changes request (i.e., preparation date; Fig. 14); and

• displaying said version number (Fig. 14).

-- Claim 12: **Imachi** discloses a process control system comprising:

• a computer having a source control system with a selectable level of source control, wherein at least one control strategy in said source control system is loadable from said computer to said controller (Fig. 1, page 6 line 50 – page 7 line 13; Fig. 4, page 8 line 24 – page 9 line 4; Fig. 10, page 5 lines 5 – 58);

• a network coupling said computer to a controller (i.e., remote secondary memory units; Fig. 4, page 8 line 24 – page 9 line 4).

-- Claim 13: **Imachi** discloses the system according to claim 12 further comprising: a database to store source control information associated with said at least one control strategy, including a version number (Fig. 1, page 6 line 50 – page 7 line 13).

-- Claim 14: **Imachi** discloses the system according to claim 13 and further discloses that said selectable level of source control is no source control and further wherein a version number is entered manually when said at least one control strategy is saved (i.e., fixed-mode; Fig. 10, page 9 lines 14 – 58).

-- Claim 15: **Imachi** discloses the system according to claim 13 and further discloses that said selectable level of source control is basic source control and further wherein a

version number is automatically incremented when said at least one control strategy is saved (i.e., auto-saving mode; Fig. 10, page 9 lines 14 – 58).

-- Claim 16: **Imachi** discloses the system according to claim 13 and further discloses that said selectable level of source control is full source control and further wherein a version number is automatically incremented when said at least one control strategy is checked-in (i.e., auto-saving mode with preservation method; Fig. 22, page 16 lines 13 – 27).

-- Claim 18: **Imachi** discloses a method for providing a source control system for a process control system, comprising:

- receiving a selection from at least two levels of source control (i.e., fixed and auto-changing modes; Fig. 4, page 8 line 24 – page 9 line 4, Fig. 10, page 5 lines 5 – 58);
- providing a user-enterable version number when an object is stored, if said selection is a first level (i.e., fixed mode; Figs. 4 and 9, page 9 lines 14 – 58); and
- providing an automatically incremented version number when an object is stored, if said selection is a second level (i.e., auto-changing mode; Figs. 4 and 9, page 9 lines 14 – 58).

-- Claim 19: **Imachi** discloses the method according to claim 18 further comprising: providing an automatically incremented version number when said object is checked-in, if said selection is a third level (i.e., auto-saving mode with preservation method; Fig. 22, page 16 lines 13 – 27).

-- Claim 20: **Imachi** discloses the method according to claim 18 further comprising: changing said selection to another of said at least two levels of source control (Fig. 12, page 10 line 62 – page 11 line 11).

-- Claim 21: **Imachi** discloses the method according to claim 18 further comprising: updating attributes of said object based on said selection (Figs. 15 – 18, page 12 line 40 – page 16 line 27).

-- Claim 22: **Imachi** discloses a computer readable medium having executable instructions stored thereon to perform a method of providing configurable levels of support for a source control system, said method comprising:

- receiving a request for a level of support (i.e., version up mode selection; Fig. 10, page 5 lines 5 – 58);
- determining whether a full level of support is licensed (i.e., version up mode with preservation method; Fig. 22, page 16 lines 13 – 27);
- determining whether an option for a basic level of support is selected (i.e., fixed mode; Fig. 22, page 16 lines 13 – 27);
- setting said level of support to full, if said full level of support is licensed (Fig. 22, page 16 lines 13 – 27);
- setting said level of support to basic is said option is selected (Fig. 22, page 16 lines 13 – 27).

-- Claim 23: The computer readable medium according to claim 22, wherein a default for said level of support is none (i.e., version mode default selection; Fig. 10, page 5 lines 5 – 58).

-- Claim 24: **Imachi** discloses a computer readable medium having executable instructions stored thereon to perform a method of changing configurable levels of support for a source control system, said method comprising:

- receiving a request to change a level of source control from a user (i.e., version up mode selection; Fig. 12, page 10 line 62 – page 11 line 11; Fig. 23, page 15 lines 46 – 55);
- determining whether a full level is licensed (Fig. 22, page 16 lines 13 – 27);
- determining whether said request is to change from none to basic as well as determining whether said request is to change from basic to none (i.e., changing between fixed mode and auto-changing mode; Fig. 4, page 8 line 24 – page 9 line 4);
- performing said request when said request is to change from none to basic or from basic to none, and storing a new level of source control (Figs. 15 – 18, page 12 line 40 – page 16 line 27).

-- Claim 25: **Imachi** discloses a computer readable medium having executable instructions stored thereon to perform a method of updating version attributes based on a level of source control, said method comprising:

- determining whether a full level is licensed (i.e., version up mode selection; Figs. 12, page 10 line 62 – page 11 line 11; Fig. 23, page 15 lines 46 – 55);

• determining whether a basic level is selected (Fig. 22, page 16 lines 13 – 27);

• receiving a save changes request for an object (Figs. 15 – 18, page 12 line 40 – page 16 line 27);

• determining whether said object is new; and setting a version number to a first version number, when said object is new (i.e., version number is V1; Figs. 14 and 27);

• updating version attributes of said object according to whether said full level is licensed and whether said basic level is selected (Fig. 23, page 15 lines 46 – 55); and

• incrementing said version number, when said object is not new and when said full level is not licensed (Fig. 22, page 16 lines 13 – 27).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over **Imachi** (6,272,678).

-- Claim 9. **Imachi** discloses the method according to claim 8 but does not explicitly disclose that said version number is incremented differently for minor changes than for major changes. File branching is a conventional method commonly utilized in software configuration management (SCM) systems for identifying variants in the same namespace that identifies revisions. The variants (the alternate implementations of a configuration item that must exist in parallel) and revisions (the iterative refinements that each variant takes on over time) form a two-dimensional version tree for a configuration item. A revision change of a variant branch point would, therefore, result in a different version number than that of a variant node change. Since file branching is a well-known method in software configuration management, it would have been obvious to one of ordinary skills in the art at the time the invention was made to implement file branching in his source control software for the purpose of uniquely identifying variants. Consequently, the version number of an object would be incremented differently for changes among the variants and their corresponding versions under branching.

-- Claim 17: **Imachi** discloses the system according to claim 12 and further discloses that said selectable level of source control is selected from the group consisting of a preference and a user interface (Figs. 10, page 5 lines 5 – 58), but does not disclose that the group further consisting of a license and an installation configuration. The source control of **Imachi** provides support for selectable levels of fixed mode, auto-changing mode, and auto-changing mode with preservation method all together in a software package where there is only one applicable license and one installation configuration. It is clear, however, that different licenses as well as installation configuration for each of the selectable modes could have easily been applied for the software of **Imachi**'s source control if it was desired for the selectable modes of the source control to be individually and separately implemented in a level of installation. Using different levels in licensing and installation configuration is a well-known method in CAD (Computer Aided Design) tools. The method enables software providers to selectively charge customers based on their needs for certain or all features provided in a software package. For example, Mentor Graphics's ModelSim, which is a HDL (High-level Design Language) software simulation CAD tool, is available in 4 different products: ModelSim LE, ModelSim PE, Modelsim SE, and Designer where Modelsim LE is the most basic and Designer is the most comprehensive products. The licensing and installation configuration of each product is different than the others. Thus, it would have been obvious to one of ordinary skills in the art of software development at the time the invention was made to further allow the group from which a selectable level of source control is selected to have license and installation configuration if it was desired

to allow **Imachi**'s source control to have separate levels of installation corresponding to the selectable source control level for pricing purposes as in ModelSim.

6. Claims 10 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Imachi** (6,272,678) in view of **Fiszman** (6,115,646).

-- Claim 10: **Imachi** discloses the method according to claim 6 and further discloses that for said level full, said method further comprises:

- providing a version control system toolbar and menu (Figs. 1, page 6 line 50 – page 7 line 13; Fig. 10, page 5 lines 5 – 58);
- automatically incrementing said version number upon check-in, including a first check-in wherein said version number is generated (Page 9, lines 14 – 58);
- displaying said version number (Fig. 14);
- setting a created-by name upon said first check-in (i.e., writer for V1; Fig. 14);
- setting a modified-by name upon said check-in, including said first check-in (i.e., writers for versions other than V1; Fig. 14);
- setting a date-created date upon said check-in, including said first check-in (i.e., preparation date for V1; Fig. 14);
- setting a version date upon said check (i.e., preparation date; Fig. 14);
- providing a version history and audit trail (Figs. 14 and 27);
- receiving a check-in comment (an inherent property of all software configuration management for documenting revision changes); and

• **Imachi**, however, does not explicitly disclose the method of claim 6 further comprising supporting a qualification life cycle model. **Fiszman** discloses a dynamic and generic process automation system implementing a life cycle process that utilizes version control software for managing its source code (Fig. 17, page 18 lines 37 – 63). Thus, it would have been obvious to one of ordinary skills in the art of software development at the time the invention was made to realize that the source control method of **Imachi** could support a qualification life cycle because source control have commonly been incorporated in large software applications (e.g., project management or life cycle management) as a back-end tool. for managing versions of source codes and objects.

-- Claim 11. **Imachi** and **Fiszman** disclose the method according to claim 10 but do not explicitly disclose that said version number is incremented differently for minor changes than for major changes. File branching is a conventional method commonly utilized in software configuration management (SCM) systems for identifying variants in the same namespace that identifies revisions. The variants (the alternate implementations of a configuration item that must exist in parallel) and revisions (the iterative refinements that each variant takes on over time) form a two-dimensional version tree for a configuration item. A revision change of a variant branch point would, therefore, result in a different version number than that of a variant node change. Since file branching is a well-known method in software configuration management, it would have been obvious to one of ordinary skills in the art at the time the invention was made to implement file branching in his source control software for the purpose of uniquely identifying variants.

Consequently, the version number of an object would be incremented differently for changes among the variants and their corresponding versions under branching.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Van Pham whose telephone number is (571) 270-1064. The examiner can normally be reached on Monday - Thursday, 9am - 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Myhre can be reached on (571) 270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7/25/2006

James Myhre
Supervisory Patent Examiner